Comprehensive Large Array-data Stewardship System (CLASS)

CLASS Supports NPP and NPOESS

NOAA has developed the Comprehensive Large Array-data Stewardship System (CLASS) to archive and provide access to the data from current satellite-based observing systems. CLASS is now being enhanced to handle the significant increases in data volume that will come from the NPP and NPOESS satellite launches.

TDRSS

GPS

Space Segment

NPOESS

Launch Support Segment

Climate and Science Data Users

Direct Broadcast User

NPOESS Data Exploitation

GSE - Svalbard Primary T&C NPP SMD

Command, Control, and Communications Segment

Interface Data Processing Segment

Mission Management Center
Suitland, Maryland

- Flight Operations Team
- Enterprise Management
- Mission Management
- Satellite Operations
- Data Monitoring and Recovery

Data Handling Node

Data Delivery

Calibrate/Validate

Infrastructure

Ingest — Data Management

Process

NESDIS Central

Science Data Segment
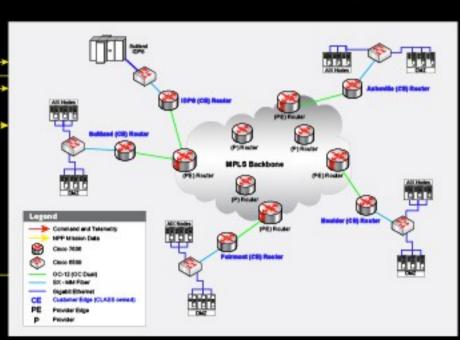
Archive and Distribution Segment (CLASS)

CLASS will archive all data products from the IDPS, including RDRs, TDRs, SDRs, selected Intermediate Products, and EDRs. Also archived will be metadata, auxiliary data (e.g., TLEs), ancillary data, calibration and validation data, software, and documentation.

Search results will include more detailed information about the retrieved data including orbit number, dataset name, and a browse image.

Search functions – CLASS will allow users to search for NPP data in any of the following ways:

- Date and time
- Geographic location
- Individual or multiple sensors
- Data type – RDR, SDR, TDR, EDR, and/or Intermediate Product

Data delivery options will include:

- Full dataset or subsetted at the granule level
- Online (FTP) or on physical media (e.g., tape)
- HDF5 format
- Individual orders using CLASS Web interface or all new data based on user subscription